## Using the Free Formation in the Glass Sculpture Design

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## **Abstract:**

The development in the free formation techniques and their followed by the artistic and technical innovation, whether in the form or the color to produce in different ways of the melted glass, the formation with the core and vacuumed glass columns of the big sizes, or by adding the colored columns during the formation in a supportive mold, or by using the grinded glass during the blowing, forming or by passing on pneumatic machine carrying metallic salts vapors give coloring features and beauty in formation. All of that motivated to study and search such advanced methods to use them in assembled aesthetical sculpture designs by finding useful formative patterns from the light units made through the free formation in the emptiness.

To achieve that, the research discusses the study of the free formation. The blown glass invention has developed with the blooming of the empire led to many complicated forms and added a glass melt in the formation, and how to apply them in artistic works have proper style for the Egyptian Architecture, till can apply such works to add wonder beauty produced from the glass as a material, giving new different possibilities rather than the possibilities and materials that manufactures such works (wood- iron- marble ...etc). That, the glass material and the possibility of adopting it consider a source of inspiration through the transparency, color and the easy formation.

It could activate the correlation, where the research has concluded to make several designs with the advanced modern technology that led to develop the glass sculpture art, and making exterior light units with such techniques, the innovative design that fits with the location, the light, color space and their relation with the exterior architecture space.

## **Research Problem:**

It could not use the relation between the advanced free formation techniques and the resulted aesthetical values from the glass in the Glass Sculpture Design for Architecture in Egypt.

## **Research Assumption:**

The study of the used modern techniques and advanced technology in the free formation from the glass melt leads to develop the Glass Sculpture of the Contemporary Architecture, aesthetically and functionally.

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